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PATREA L. PABST HOLLAND & KNIGHT LLP SUITE 2000, ONE ATTANTIC CENTER			EXAMINER	
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			DATE MAILED: 03-24-2003	1/2

Please find below and or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
	_	09/779,427	STEINBUCHEL ET AL.			
	Office Action Summary	Examiner	Art Unit			
		Gerald G Leffers Jr.	1636			
	The MAILING DATE of this communication					
Period fo	r Reply					
THE I - Exter after - If the - If NO - Failur - Any re	ORTENED STATUTORY PERIOD FOR REMAILING DATE OF THIS COMMUNICATION Is ions of time may be available under the provisions of 37 CF SIX (6) MONTHS from the mailing date of this communication period for reply specified above is less than thirty (30) days, is period for reply is specified above, the maximum statutory per to reply within the set or extended period for reply will, by seply received by the Office later than three months after the not patent term adjustment. See 37 CFR 1.704(b).	DN. R 1.136(a). In no event, however, m a reply within the statutory minimum riod will apply and will expire SIX (6) latute, cause the application to beco	ray a reply be timely filed of thirty (30) days will be considered timely. MONTHS from the mailing date of this communication. The ABANDONED (35 U.S.C. § 133).			
1)[]	Responsive to communication(s) filed on	1 <u>30 December 2002</u> .				
2a) <u></u>	This action is <b>FINAL</b> . 2b)⊠	This action is non-final.				
3) 🗌	Since this application is in condition for al closed in accordance with the practice un on of Claims					
	Claim(s) <u>1-18 and 31-36</u> is/are pending in	the application.				
	4a) Of the above claim(s) is/are with					
	Claim(s) is/are allowed.	arawii nom comoraeranen				
	Claim(s) <u>1-18 and 31-36</u> is/are rejected.					
	Claim(s) is/are objected to.					
·	Claim(s) are subject to restriction a	nd/or election requirement				
	on Papers	id/of election requirement				
• •	The specification is objected to by the Exan	niner.				
,—	The drawing(s) filed on is/are: a)☐ a		by the Examiner.			
, —	Applicant may not request that any objection					
11) 🔲 🛚	The proposed drawing correction filed on _					
	If approved, corrected drawings are required i	n reply to this Office action.				
12) 🗌 🗆	The oath or declaration is objected to by the	e Examiner.				
Priority u	nder 35 U.S.C. §§ 119 and 120					
13)	Acknowledgment is made of a claim for for	eign priority under 35 U.S	s.C. § 119(a)-(d) or (f).			
a)[	☑ All b)☐ Some * c)☐ None of:					
	1. Certified copies of the priority docum	nents have been received				
	2. Certified copies of the priority docum	ents have been received	in Application No. <u>08/809,286</u> .			
	3. Copies of the certified copies of the application from the Internationa	Bureau (PCT Rule 17.2)	a)).			
	ee the attached detailed Office action for a					
14)∐ A	cknowledgment is made of a claim for dom					
	The translation of the foreign language	provisional application h.	4c been teceliked			
attachment	(S)					
	e of References Cited (PTO-892)	$oldsymbol{\Delta}_{1,1}$ . Inter	view Summary (PTO-415) Paper (vojs)			
2) Notice	e of Draftsperson's Patent Drawing Review (PTO-948 nation Disclosure Statement(s) (PTO-1449) Paper No	5) Notic	e of Informal Patent Application (PTO-152)			
	(a) (4.0° Office	e Action Summary	. her of Paper 1, 111			

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## **DETAILED ACTION**

Receipt is acknowledged of a new Power of Attorney, filed on 12/30/02 as Paper No. 8, with attached copies of the assignment papers. Receipt is also acknowledged of an amendment, filed 12/30/02 as Paper No. 12, in which several claims were amended (claims 1-18) and in which several new claims were added (proposed claims 37-42). However, because the next available claim number was claim 31, the newly submitted claims have been renumbered as claims 31-36 (Rule 1.126).

Any rejection of record that is not addressed by this action is hereby withdrawn. Claims 1-18 and 31-36 are pending in the instant application. This action is <u>not</u> final because of new grounds of rejection that are raised in the instant action that were not necessitated by applicants' amendment of the claims.

### Oath/Declaration

The supplemental Declaration filed on 12/30/02 for Mathias Leibergessell is proper and obviates the objection made in the previous office action.

## Claim Objections

Claim 3 is objected to because of the following informalities: the presence of the word "and" in the middle of the Markush group between the words "citric acid esters" and "citric acid lactones" is confusing and improper. It would be remedial to amend the claim by deleting "and" at this position and inserting a comma in its place. Appropriate correction is required

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## Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-18 and 31-36 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Amended claim 1 comprises the limitation that a "recombinant organism" is used in the methods for producing poly(hydroxy fatty acids). The originally filed specification only describes the use of recombinant bacteria in the claimed methods and does not provide support for the broadly claimed scope of a "recombinant organism" (e.g. a transgenic mouse). Therefore, the newly added limitation of a "recombinant organism" is impermissible NEW MATTER. It would be remedial to amend claim 1 and dependent claims to read on recombinant bacteria, for which there is ample support in the specification.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Many of the following rejections are for lack of proper antecedent basis in the claims.

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"incubating" and "cultivation" in the rejected claims, making it unclear whether additional steps are required to practice the claimed method. The specific rejections follow.

Claims 2, 5-7, 11-18, 33-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 is vague and indefinite in that there is no clear and positive prior antecedent basis for the term "bacteria" in claim 1, upon which claim 2 is directly dependent.

Claim 5 is vague and indefinite in that there is no clear and positive prior antecedent basis for the term "poly(hydroxy fatty acids)" in claim 1, upon which claim 6 is directly dependent.

Claim 1 recites in the preamble "poly(hydroxy fatty acids" and further recites "a poly(hydroxy fatty acid)". It would be remedial to amend claim 1 to provide a clear and positive prior antecedent basis for the term "poly(hydroxy fatty acids)".

Claim 6 is vague and indefinite in that there is no clear and positive prior antecedent basis for the term "poly(hydroxy fatty acid)" in claim 1, upon which claim 5 is directly dependent.

Claim 1 recites in the preamble "poly(hydroxy fatty acids" and further recites "a poly(hydroxy fatty acid)". It would be remedial to amend claim 1 to provide a clear and positive prior antecedent basis for the term "poly(hydroxy fatty acid)".

Claim 7 is vague and indefinite in that the metes and bounds of the phrase "cultivated at cell densities of up to 100 g of dry cellular mass per liter of bacterial nutrient medium" are

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clear and positive prior antecedent basis for the term "recombinant bacteria" in claim 1, upon which claim 7 is directly dependent.

Claim 11 is vague and indefinite in that the metes and bounds of the phrase "after approximately 12 h and 24 h at approximately 27°C to 35°C" are unclear. It is unclear as the claim is written as to whether the phrase "27°C to 35°C" simply refers to the temperature at the time of addition of the carbon source to the culture media, or refers to the temperature of the culture media for the duration of the incubation or cultivation time. It would be remedial to amend the claim by making clear what exactly is referred to by the duration and temperature limitations recited in the claim (e.g. by spelling out "hours" and by inserting the appropriate term, incubation or cultivation or growth, etc.).

Claim 12 is vague and indefinite in that there is no clear and positive prior antecedent basis for the term "cultivation" in claim 1, upon which claim 12 is directly dependent. It is unclear whether the step of "cultivation" implies an additional step to the "incubation" step of claim 1, or whether it specifies an additional method step.

Claim 13 is vague and indefinite in that there is no clear and positive prior antecedent basis for the term "recombinant bacteria" in claim 1, upon which claim 13 is directly dependent.

Claims 14-15 are vague and indefinite in that there is no clear and positive prior antecedent basis for the term "harvested recombinant bacteria" in claim 1, upon which these claims are directly dependent. These claims are further vague and indefinite in that there is no clear and positive prior antecedent basis for the term "poly(hydroxy fatty acids) in claim 1, upon which these claims are dependent

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Claim 16 is vague and indefinite in that there is no clear and positive prior antecedent basis for the term "poly(hydroxy fatty acid)" in claim 1, upon which claim 16 is indirectly dependent. Claim 1 recites in the preamble "poly(hydroxy fatty acids" and further recites "a poly(hydroxy fatty acid)". It would be remedial to amend claim 1 to provide a clear and positive prior antecedent basis for the term "poly(hydroxy fatty acid)".

Claim 16 is further vague and indefinite in that the metes and bounds of the phrase "wherein the product is obtained essentially pure form by removing the hydrophilic solvent" are unclear. The term "essentially pure" is not explicitly defined in the specification and is subjective. It is not clear that the term "essentially pure" does not add a further limitation to the step of obtaining the product by removing the hydrophilic solvent after precipitation of the product. If it is meant to add a further limitation to the step of removing the hydrophilic solvent, the intended limitation needs to be set forth such that one can understand its metes and bounds. If the term "essentially pure" simply describes the state of the product following removal of the hydrophilic solvent, the term is unnecessarily confusing and should be deleted from the claim.

Claim 17 is vague and indefinite in that there is no clear and positive prior antecedent basis for the terms "harvested recombinant bacteria" and "the bio-reactor". Also, the phrase "in order to be processed further" implies some further limitation whose metes and bounds are unclear. As the phrase is simply intended use language and does not actually further limit the claim, the phrase "in order to be processed further" should be deleted from the claim language.

Claims 31-32 are vague and indefinite in that there is no clear and positive prior antecedent basis for the term "poly(hydroxy fatty acid)" in claim 1, upon which these claims are

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recites "a poly(hydroxy fatty acid)". It would be remedial to amend claim 1 to provide a clear and positive prior antecedent basis for the term "poly(hydroxy fatty acid)".

Claim 33 is vague and indefinite in that there is no clear and positive prior antecedent basis for the term "case" in claim 10, upon which claim 33 is dependent. It would be remedial to amend the claim to read "each step".

Claim 33 is also vague and indefinite in that the metes and bounds of the phrase "after approximately 12 h and 24 h at approximately 30°C" are unclear. It is unclear as the claim is written as to whether the term "30°C" simply refers to the temperature at the time of addition of the carbon source to the culture media, or refers to the temperature of the culture media for the duration of the incubation or cultivation time. It would be remedial to amend the claim by making clear what exactly is referred to by the duration and temperature limitations recited in the claim (e.g. by spelling out "hours" and by inserting the appropriate term, incubation or cultivation or growth, etc.).

Claims 34-35 are vague and indefinite in that there is no clear and positive prior antecedent basis for the term "cultivation" in claim 1, upon which claims 34-35 are directly dependent. It is unclear whether the step of "cultivation" implies an additional step to the "incubation" step of claim 1, or whether it specifies an additional method step.

Claim 36 is vague and indefinite in that there is no clear and positive prior antecedent basis for the term "poly(hydroxy fatty acid) polymer" in claim 1, upon which claim 36 is dependent. Also, the claim is confusing in that it recites a Markush of "one or more monomers" and then recites different combinations of monomers. It would be remedial to amend the claim

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language by inserting the words "combination of' between the words "more" and "monomers" in line two of claim 36.

#### Conclusion

The claims are free of the art. No claims are allowed due to 112 1<sup>st</sup> and 2<sup>nd</sup> paragraph issues.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gerald G Leffers Jr. whose telephone number is (703) 308-6232. The examiner can normally be reached on 9:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Remy Yucel can be reached on (703) 305-1998. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7939 for regular communications and (703) 305-7939 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

Gerald & felf. 1.

Examiner

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Ggl March 21, 2003